

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: STREETWORKS

Report Number: P265810

Luminaire Tested: **ARCH-M-AF48-100-D-U-T3-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265810
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29465)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-M-AF48-100-D-U-T3-7027
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 660mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11569.7 lumens
Efficiency: N/A
Efficacy: 114.6 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1' x H: 0')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B2 - U0 - G2

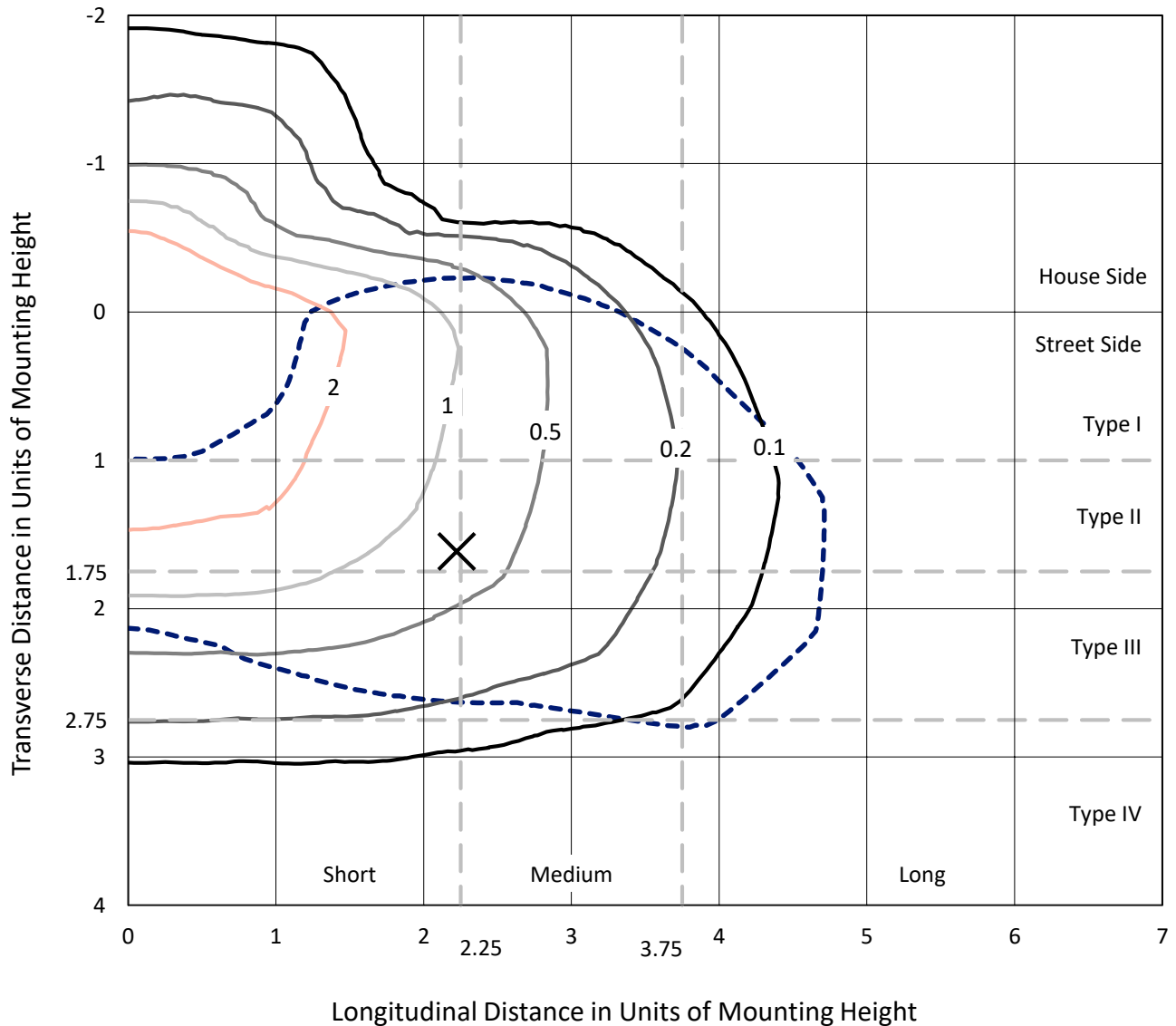
Input Watts (W): 101
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

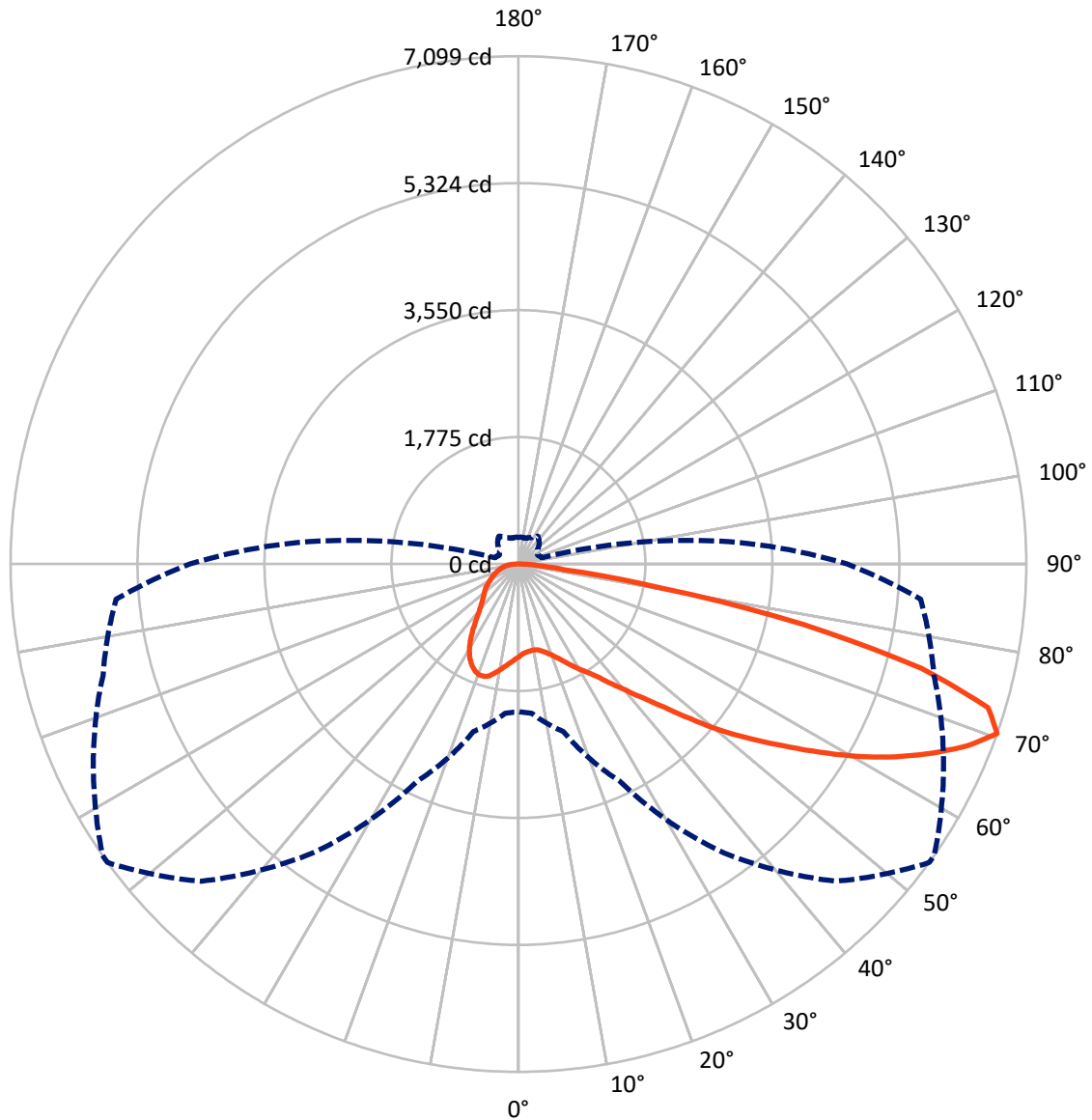
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 3.8 fc
 Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2624.0	0.0	2624.0
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	8945.7	0.0	8945.7
	% Fixture	77.3	0.0	77.3
Total	Lumens	11569.7	0.0	11569.7
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	127.0	1.1
10°-20°	405.9	3.5
20°-30°	705.2	6.1
30°-40°	1030.5	8.9
40°-50°	1617.4	14.0
50°-60°	2487.2	21.5
60°-70°	3038.7	26.3
70°-80°	1884.0	16.3
80°-90°	273.7	2.4
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	11569.7	100.0
0°-180°	11569.7	100.0



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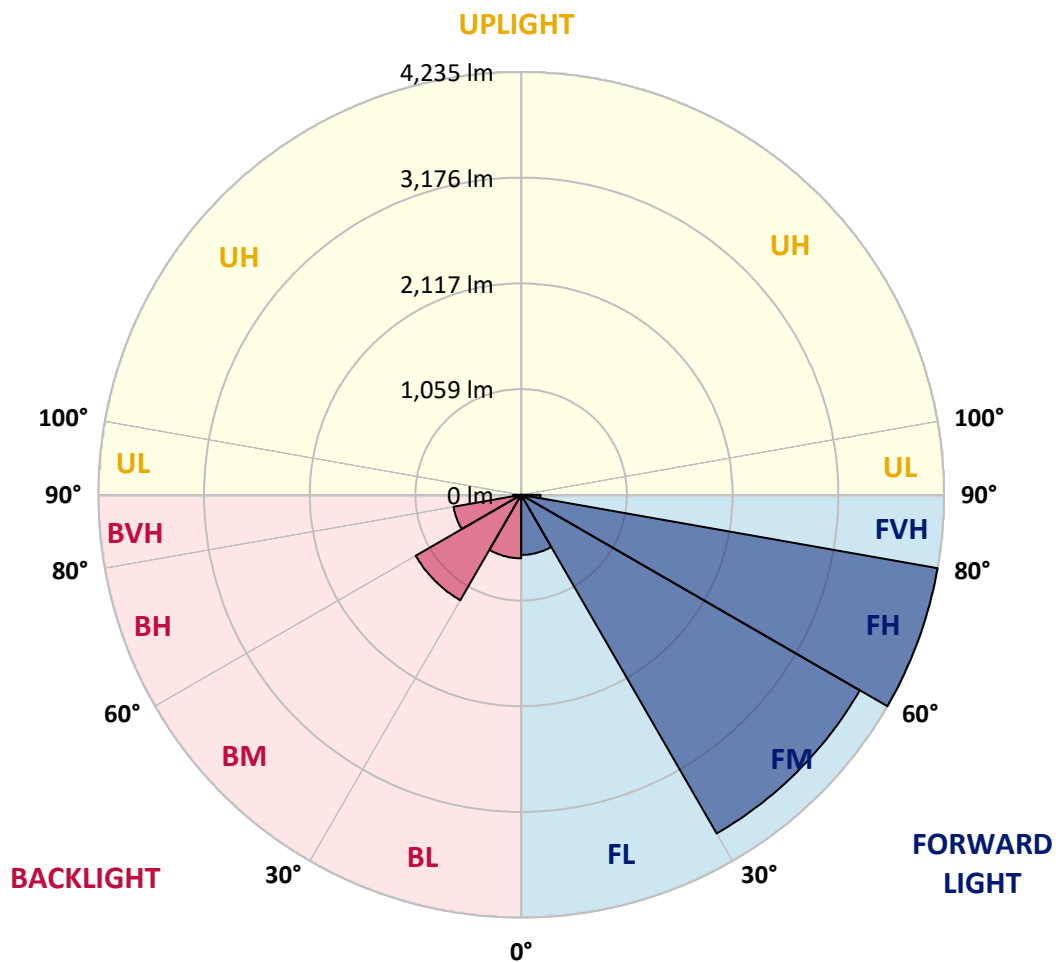
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	602.0	5.2			
FM	(30°-60°)	3915.8	33.8			
FH	(60°-80°)	4234.7	36.6			G2/5000
FVH	(80°-90°)	193.3	1.7			G2/225
BL	(0°-30°)	636.1	5.5	B2/1000		
BM	(30°-60°)	1219.3	10.5	B2/2500		
BH	(60°-80°)	688.1	5.9	B2/1000		G2/1000
BVH	(80°-90°)	80.4	0.7			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	1294.4	1294.4	1294.4	1294.4	1294.4	1294.4	1294.4	1294.4	1294.4	1294.4	1294.4
2.5°	1243.6	1239.3	1239.3	1245.7	1247.8	1254.2	1254.2	1256.3	1262.7	1273.3	1286.0
5°	1205.4	1203.3	1205.4	1213.9	1218.1	1230.9	1235.1	1237.2	1249.9	1266.9	1286.0
7.5°	1167.3	1165.2	1169.5	1182.1	1194.8	1213.9	1224.5	1226.6	1245.7	1268.9	1294.4
10°	1154.6	1152.4	1158.9	1169.5	1182.1	1203.3	1220.3	1222.5	1249.9	1277.5	1313.5
12.5°	1171.5	1169.5	1175.8	1186.4	1199.1	1213.9	1233.0	1235.1	1271.1	1307.2	1345.2
15°	1213.9	1213.9	1216.0	1222.5	1235.1	1247.8	1264.8	1266.9	1305.0	1347.4	1385.5
17.5°	1279.5	1275.4	1275.4	1273.3	1281.7	1288.1	1309.2	1311.3	1351.6	1389.8	1427.9
20°	1360.2	1358.0	1349.6	1339.0	1336.8	1341.0	1362.2	1364.3	1404.6	1436.4	1472.4
22.5°	1457.5	1459.7	1440.6	1417.3	1406.7	1413.0	1432.1	1434.2	1463.9	1491.5	1523.3
25°	1586.8	1580.4	1552.9	1518.9	1497.8	1497.8	1516.9	1516.9	1544.4	1561.3	1582.5
27.5°	1709.7	1697.0	1671.6	1622.8	1588.9	1595.2	1614.3	1614.3	1639.8	1646.1	1656.7
30°	1843.1	1830.3	1798.6	1737.2	1692.6	1688.5	1711.8	1709.7	1743.5	1741.5	1732.9
32.5°	2006.3	1999.8	1946.9	1868.6	1809.2	1794.4	1815.6	1817.7	1838.9	1832.5	1805.0
35°	2235.1	2232.9	2184.1	2046.5	1968.0	1940.6	1953.3	1953.3	1968.0	1951.2	1904.5
37.5°	2523.2	2527.4	2485.0	2281.7	2171.6	2124.9	2126.9	2124.9	2129.2	2110.1	2061.3
40°	2811.2	2821.8	2819.8	2574.1	2434.1	2353.6	2324.1	2319.8	2330.4	2321.8	2275.2
42.5°	3190.5	3215.9	3156.6	2934.1	2777.4	2641.7	2561.2	2550.6	2574.1	2584.7	2540.0
45°	3584.5	3576.1	3482.9	3321.8	3179.9	3006.2	2853.6	2836.7	2853.6	2885.4	2838.9
47.5°	3789.9	3783.8	3760.3	3679.8	3658.6	3459.6	3228.6	3213.7	3182.1	3226.5	3171.5
50°	4129.0	4135.3	4039.9	4031.6	4120.5	4010.4	3652.2	3618.5	3561.2	3597.3	3550.6
52.5°	4374.7	4347.2	4287.9	4362.0	4639.6	4580.3	4050.5	4035.7	3982.8	3974.3	3953.1
55°	4474.3	4474.3	4484.9	4656.5	5052.6	4974.3	4482.8	4497.6	4425.6	4366.3	4393.8
57.5°	4504.0	4516.7	4607.8	4891.7	5537.8	5281.4	4959.5	4980.7	4876.9	4758.2	4845.1
60°	4357.8	4395.9	4614.1	5025.1	5811.0	5607.7	5461.5	5468.0	5317.4	5143.8	5296.2
62.5°	3982.8	4029.4	4419.2	5080.3	5766.6	5942.5	5936.1	5950.9	5745.4	5529.3	5720.0
65°	3523.2	3569.8	3984.9	4925.5	5732.8	6181.9	6370.4	6410.7	6145.8	5855.6	5984.8
67.5°	2847.3	2908.7	3302.8	4404.4	5567.4	6378.9	6777.2	6819.6	6455.1	6025.1	5961.5
70°	2063.4	2093.1	2423.5	3347.3	4893.7	6270.8	7099.1	7097.1	6556.8	6012.4	5643.7
72.5°	993.5	1016.9	1302.9	2078.3	3499.7	5321.6	6866.1	6906.3	6417.0	5828.1	4917.1
75°	408.9	432.2	527.6	877.0	1836.8	3516.8	5819.6	5914.9	5828.1	5230.7	3847.3
77.5°	254.2	262.8	309.2	453.4	838.9	1641.8	4074.0	4203.1	4618.4	4190.5	2540.0
80°	190.7	197.0	231.0	317.8	529.6	605.8	2023.3	2186.4	2798.6	2404.6	1150.4
82.5°	158.9	160.9	184.3	231.0	360.1	347.5	648.2	722.3	1305.0	917.3	396.2
85°	148.3	152.5	165.3	165.3	228.8	218.2	269.0	281.8	379.3	313.6	137.7
87.5°	76.3	72.0	146.2	129.3	118.7	105.9	114.4	122.9	141.9	150.5	61.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1294.4	1294.4	1294.4	1294.4	1294.4	1294.4	1294.4	1294.4	1294.4	1294.4	1294.4
2.5°	1290.1	1296.6	1307.2	1317.8	1330.4	1345.2	1353.7	1364.3	1372.8	1368.6	1366.4
5°	1296.6	1307.2	1330.4	1351.6	1377.0	1406.7	1425.8	1447.0	1463.9	1468.1	1461.8
7.5°	1307.2	1326.2	1358.0	1396.1	1430.0	1468.1	1497.8	1527.5	1548.7	1552.9	1552.9
10°	1332.5	1353.7	1396.1	1447.0	1487.2	1527.5	1561.3	1584.7	1603.7	1612.2	1612.2
12.5°	1368.6	1394.0	1444.8	1506.3	1550.7	1588.9	1608.0	1618.6	1627.0	1635.5	1637.6
15°	1411.0	1438.5	1499.9	1565.6	1612.2	1631.2	1631.2	1629.2	1629.2	1633.4	1637.6
17.5°	1453.3	1482.9	1546.5	1616.4	1646.1	1635.5	1620.6	1614.3	1610.1	1608.0	1614.3
20°	1497.8	1527.5	1591.0	1656.7	1648.2	1603.7	1582.5	1567.7	1555.0	1548.7	1557.1
22.5°	1546.5	1574.1	1639.8	1684.2	1620.6	1552.9	1512.7	1489.3	1468.1	1455.4	1463.9
25°	1603.7	1631.2	1694.8	1692.6	1571.9	1476.6	1413.0	1374.9	1351.6	1339.0	1339.0
27.5°	1671.6	1694.8	1756.2	1671.6	1504.1	1374.9	1281.7	1245.7	1239.3	1228.7	1228.7
30°	1741.5	1760.5	1813.5	1622.8	1411.0	1241.5	1139.8	1122.8	1124.9	1114.3	1116.5
32.5°	1813.5	1832.5	1847.4	1550.7	1290.1	1091.0	1023.3	1010.6	1008.3	1000.0	991.5
35°	1915.1	1942.7	1851.5	1453.3	1144.0	966.0	917.3	904.7	891.8	862.3	862.3
37.5°	2069.8	2099.5	1840.9	1332.5	993.5	868.7	824.1	807.1	785.9	756.4	745.8
40°	2281.7	2281.7	1817.7	1196.9	872.9	790.1	747.7	726.6	703.4	673.6	667.4
42.5°	2531.7	2472.3	1781.7	1059.2	783.9	737.2	699.2	675.9	648.2	614.4	610.0
45°	2824.0	2662.9	1730.9	936.5	718.1	705.4	682.2	641.8	595.2	559.3	552.9
47.5°	3107.9	2834.6	1682.0	849.5	663.0	692.8	673.6	605.8	542.3	491.6	485.2
50°	3419.3	2987.1	1624.9	777.6	620.6	684.2	663.0	552.9	483.0	446.9	442.8
52.5°	3730.8	3141.7	1563.5	701.2	584.6	667.4	637.6	514.8	481.0	432.2	425.8
55°	4059.1	3321.8	1491.5	616.4	542.3	633.5	603.8	512.8	495.8	432.2	417.4
57.5°	4379.0	3520.9	1374.9	533.9	495.8	582.6	591.1	499.9	464.0	428.0	411.0
60°	4732.8	3732.8	1182.1	464.0	455.5	540.2	574.1	472.4	428.0	415.2	406.8
62.5°	5016.7	3923.4	923.6	415.2	421.6	506.4	552.9	455.5	413.1	402.5	400.5
65°	5139.6	3927.7	663.0	372.8	387.7	474.6	531.7	440.7	400.5	396.2	394.0
67.5°	5010.2	3711.6	466.1	332.6	351.6	444.9	504.2	425.8	387.7	389.9	385.6
70°	4592.9	3256.1	341.0	294.5	317.8	413.1	474.6	406.8	372.8	377.1	370.7
72.5°	3842.9	2538.0	273.3	262.8	290.2	379.3	444.9	385.6	349.6	351.6	339.0
75°	2838.9	1682.0	228.8	235.1	258.4	347.5	406.8	358.1	324.1	315.7	307.2
77.5°	1688.5	864.3	188.6	205.5	231.0	309.2	364.4	324.1	296.6	281.8	275.4
80°	696.9	349.6	154.7	173.7	201.3	275.4	322.0	283.9	264.8	250.0	241.6
82.5°	277.5	171.5	122.9	141.9	169.5	239.4	281.8	250.0	231.0	220.4	197.0
85°	105.9	84.7	82.6	99.5	127.1	184.3	233.0	209.8	194.9	167.4	160.9
87.5°	42.4	38.2	38.2	48.7	72.0	116.5	167.4	146.2	152.5	120.7	122.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)